

ABSTRACT OF THE DISCLOSURE

The present invention offers a coherent light generating device with extremely little Fresnel loss. Additionally, the invention makes anti-reflection coatings on the end surfaces of a wavelength-converting medium unnecessary, while also reducing deterioration of anti-reflection coatings and wavelength-converting medium end surfaces, thereby improving the durability of the device. The invention relates to a coherent light generating device comprising an excitation beam source for generating an excitation beam polarized in a predetermined direction; a wavelength-converting medium having a first end surface and a second end surface, for receiving the excitation beam incident on the first end surface and outputting from the second end surface one or two wavelength-converted beams polarized in the same direction as the predetermined direction; and first and second mirrors provided respectively at the first end surface and the second end surface of the wavelength-converting medium, for reflecting wavelength-converted light emitted from the wavelength-converting medium and causing resonance thereof; wherein the first end surface is oriented so that the excitation beam and the wavelength-converted beam reflected by the first mirror are incident at roughly the Brewster's angle, and the polarization of the excitation beam and the wavelength-converted beam is P-polarized with respect to the first end surface; and the second end surface is oriented so that the wavelength-converted beam reflected by the second mirror is incident at roughly the Brewster's angle, and the polarization of the wavelength-converted beam is P-polarized with respect to the second end surface.